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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/17/2005

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EXAMINER

ZHANG, FAN

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/553,390	Applicant(s) MASHITANI ET AL.	
	Examiner FAN ZHANG	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4,6-9,14,15 and 21-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4, 6-9, 14, 15, and 21-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 16, 2010 has been entered. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 10/553,390, filed on 10/17/2005. Currently claims 4, 6-9, 14, 15, and 21-27 are rejected; and claims 1-3, 5, 10-13, and 16-20 are cancelled.

Response to Arguments

2. Applicant's remarks with respect to newly added independent claims 22-27 have been fully considered and found persuasive. A new ground of rejection has been introduced below.

With respect to claims 22, 23, and 25, Applicant's arguments on teaching of order of priority are found persuasive and a new ground of rejection has been introduced below.

Regarding the newly added limitations on order-of-priority and order of alignment based on display-manner information in claims 22-25, Examiner can not find exact support from the original spec. However, since display-manner can be broadly interpreted as 2D/3D display or vertical/horizontal display, and an order of priority or an

order of alignment cannot be established until such display manner is defined first, Examiner would like to give it benefit of the doubt and would not initiate 112 rejection. Regarding the added limitations on order of priority and order of alignment based on purpose of use in claims 26 and 27, Examiner could not find direct support or relative information or meaning conveyed from the spec. Therefore, 112 rejections are given to claims 26 and 27 as stated below.

Claim Rejections - 35 USC § 112

3. Claims 26 and 27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claims 26 and 27, regarding the limitations on order of priority information and order of alignment information specifying order of the two or more two-dimensional image data selected based on the purpose of use information, Examiner could not find related supports from the original specification.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takemoto et al (US Pub: 2003/0048354) (Applicant submitted reference).

Regarding claim 27 (New), Takemoto et al teach: A stereoscopic image display apparatus for creating stereoscopic vision- use images based on a plurality of two-dimensional image data of different viewpoints [p0135], comprising:

means for obtaining, from attached information attached to the two-dimensional image data [p0139, p0140], viewpoint-number information of each two-dimensional image [abstract, p0135, p0182], the viewpoint-number information being information for selecting two-dimensional image data [p0175-p0179], and purpose-of-use information indicating for what purposes the two-dimensional image data selected by the information for selecting is to be used [p0141-p0147 (Whether an image is used as 2D, 3D; or whether it is used for stereovision would be considered as purpose of use.)]; and

means, in a case of executing a process in which it is needed to select two or more two-dimensional image data, for selecting a certain number of the two-dimensional image data specified by the viewpoint-number information as information for selecting the two-dimensional images according to an order of alignment of the viewpoint-number information [p0265, p0282-p0285 (Proper order and reverse order are considered as order of alignment.)],

wherein the order of alignment of the viewpoint-number information specifies order of the two or more two-dimensional image data selected based on the purpose-of-use information [p0141-p0147 (Whether an image is used as 2D, 3D; or whether it is

Art Unit: 2625

used for stereovision would be considered as purpose of use. Takemoto et al teach specifying order of alignment as stated above.)). Takemoto et al do not directly relate order of alignment to purpose of use for each image. However, since defining the purpose of use of images takes place at the very beginning and specifying order of alignment takes place after 2D images are predefined/obtained, the later occurred alignment would have been obviously executed based on predefined 2D images to an ordinary skilled in the art for the purpose of defining parameters for each image in a proper and logical order.

6. Claims 4, 6-9, 14, 15, and 21-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takemoto et al (US Pub: 2003/0048354) (Applicant submitted reference) and in further view of Imaizumi et al (JP Patent: 2000023198).

Regarding claim 22 (New), Takemoto et al teach: A stereoscopic vision-use image providing method for providing as data a plurality of two-dimensional images of different viewpoints for use as stereoscopic vision-use images [p0135], the method comprising the steps of: providing, by a computer, the two-dimensional image data [p0041]; and attaching, by the computer, attached information to the two-dimensional image data [p0139, p0140], the attached information including: viewpoint-number information allotted to each two-dimensional image data, or information for obtaining, by an arithmetic calculation on a receiver side, viewpoint- number information in each two-dimensional image area in image data [abstract, p0135, p0182], the viewpoint- number information being information for selecting two or more of the two-dimensional image

Art Unit: 2625

data [p0175-p0179]; and display-manner information indicating in what manner the two-dimensional image data selected by the information for selecting is to be displayed [p0140-p0144, p0147 (Display-manner information is defined as in what style images are displayed, such as in two-dimension, three-dimension, or side-by-side.)].

Takemoto et al do not explicitly define order-of-priority information for each viewpoint. In the same field of endeavor, Imaizumi et al teach: order-of-priority information indicating an order-of-priority of selected viewpoint numbers; wherein the order-of-priority information specifies order of the two or more two-dimensional image data selected based on the display-manner information [p0008, p0011, p0012 (images are selected according to the ranking of viewpoints in two-dimension manner. Order of priority is provided after a display manner, either 2D or 3D, is defined.)]. Assigning ranking/priority orders to viewpoints and selecting images corresponding to viewpoints based on ranking have been well practiced in the art as prescribed by Imaizumi et al. Therefore, it would have been obvious for an ordinary skilled in the art to modify the teaching of Takemoto et al to assign ranking/priority orders to viewpoints and select the corresponding images based on the ranking number information in the header for the purpose of properly organizing information for more efficient image/viewpoint identification and selection.

Claim 23 (new) has been analyzed and rejected with regard to claim 22.

Regarding claim 24 (new), the rejection and rationale applied to claim 22 has been incorporated here. Takemoto et al further teach: means for selecting the two-dimensional images according to an order of alignment of the viewpoint-number; and the order of alignment of the viewpoint-number information specifies order of the two or more two-dimensional image data selected based on the display-manner information [p0265, p0282-p0285 (Proper order and reverse order are considered as order of alignment. Order of alignment is given to those viewpoint images which have display manner (2D/3D) already defined.)].

Claim 25 (new) has been analyzed and rejected with regard to claim 22 and in accordance with Imaizumi et al's further teaching on means, in a case of executing a process in which it is needed to select two or more two-dimensional image data, for selecting a certain number of the two-dimensional image data specified by the viewpoint-number information as information for selecting the two-dimensional images, based on the order-of-priority information [p0008].

Claim 26 (new) has been analyzed and rejected with regard to claim 25 and in accordance with Takemoto et al's further teaching on: means for obtaining purpose-of-use information indicating for what purposes the two-dimensional image data selected by the information for selecting is to be used; and the order-of-priority information specifies order of the two or more two-dimensional image data selected based on the purpose-of-use information [p0141-p0147 (Whether an image is used as 2D, 3D; or

whether it is used for stereovision would be considered as purpose of use. Imaizumi et al teach specifying and selecting the order of priority/ranking of each image/viewpoint as specified in claim 25. Since the ranking process takes place after 2D images are defined/obtained, given Takemoto et al's teaching on defining the purpose of use of images at the very beginning, the later occurred ranking is obviously based on predefined 2D images.)).

Regarding claim 4 (currently amended), the rationale applied to the rejection of claims 22 or 23 has been incorporated herein. Takemoto et al further teach: A stereoscopic vision-use image providing method according to claim 22 or 23, wherein the attached information further includes information for indicating whether or not the plurality of two-dimensional images are an endless series of two-dimensional images in which any two adjacent viewpoints, including the images at each end of the series, are continuous [figs. 35a, 35b (For images in those endless series the first and the last images always exist no matter how shifting is performed.); p0265, p0265 figs. 34a, 34b (The images are shifted in those limited (non-endless) series so that the first and last images from before shifting are eliminated after shifting.)]. Although Takemoto et al do not specifically include in an attached header the information indicating whether a series of images are endless, Takemoto et al prescribe and illustrate various consequences on images in a series from being shifted based on the information. Therefore, it would have been obvious for an ordinary skilled in the art to modify Takemoto et al's teaching to add an indication in a header regarding available information on whether a series of

images are endless for the purpose of image status indication per user preference.

Regarding claim 6 (currently amended), the rationale applied to the rejection of claims 22 or 23 has been incorporated herein. Takemoto et al further teach: A stereoscopic vision-use image providing method according to claim 22 or 23, wherein the attached information further includes purpose-of-use information indicating for what purposes the two-dimensional image data selected by the information for selecting is to be used [p0140-p0146 (Purpose of use of an image is indicated as whether or not the image is for stereovision.)].

Regarding claim 7 (previously presented), the rejection applied to claim 6 has been incorporated herein. Although Takemoto et al do not use "0" and "1" to indicate validity/invalidity of purpose of use, Takemoto et al apply "0" and "1" for indicating validity/invalidity of other information such as boundary process existing or not and same arrangement of camera or not as prescribed in [p0148-p0150, p0167-p0169]. Therefore, it would have been obvious for an ordinary skilled in the art to apply "0" and "1" to DIM region to indicate whether or not the image is for stereovision for the purpose of presenting clear and obvious indication per user preference.

Regarding claim 8 (currently amended), the rationale applied to the rejection of claims 22 or 23 has been incorporated herein. Takemoto et al further teach: A stereoscopic vision-use image providing method according to claim 22 or 23, wherein

Art Unit: 2625

the attached information further includes information indicating what description formats are adopted as a description format of the information [p0029, p0139 (The predetermined prescribed coding format is considered as a description format.)].

Regarding claim 9 (currently amended), the rationale applied to the rejection of claims 22 or 23 has been incorporated herein. Takemoto et al further teach: A stereoscopic vision-use image providing method according to claim 22 or 23, wherein the attached information is provided by any one of broadcasting, communicating, or recording into a recording medium [abstract].

Regarding claim 14 (currently amended), the rationale applied to the rejection of claims 24 or 25 has been incorporated herein. Takemoto et al further teach: A stereoscopic image display apparatus according to claim 24 or 25, wherein the process which is not a primary stereoscopic vision-use image process is a process for displaying on a screen one or a plurality of the two-dimensional image data by applying thereto a reduction-in-size process in order to show contents of the plurality of the two-dimensional image data of different viewpoints [p0053, p0133].

Regarding claim 15 (currently amended), the rationale applied to the rejection of claims 24 or 25 has been incorporated herein. Takemoto et al further teach: A stereoscopic image display apparatus according to claim 24 or 25, wherein the process is a process for selecting, out of a plurality of two-dimensional image data of different

Art Unit: 2625

viewpoints [p0044, p0193], one or a plurality of the two-dimensional image data for use of at least one of a print-out and an image delivery [p0045, p0132 (Transmission of an image is considered as image delivery.)].

Regarding claim 21 (currently amended), the rationale applied to the rejection of claims 24 or 25 has been incorporated herein. Takemoto et al further teach: A stereoscopic image display apparatus according to claim 24 or 25, comprising a means for obtaining, from the attached information, information indicating what description formats as a description format of the information is adopted, wherein, in a case of being capable of obtaining the information, a content of the attached information is recognized based on the description format indicated in the information [p0140-p0147, p0189-p0191].

Contact

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fan Zhang whose telephone number is (571) 270-3751. The examiner can normally be reached on Mon-Fri from 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benny Q. Tieu can be reached on (571) 272-7490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

Art Unit: 2625

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Fan Zhang/

Patent Examiner

/Benny Q Tieu/

Supervisory Patent Examiner, Art Unit 2625